# **UDOT Acronym and Terminology List**

#### -A-

3R Resurfacing, Restoring, Rehabilitating

**4R** Highway reconstruction, resurfacing, restoration and rehabilitation

404 A permit required by the U.S. Army Corps of Engineers before any work in a live stream or wetland can occur

**AADT** Annual Average Daily Traffic

**AAP** Affirmative Action Plan

**AAR** Association of American Railroads

**AASHTO** American Association of State Highway and Transportation Officials: national group of transportation agencies whose focus is to study issues and develop policies and standards related to all aspects of transportation.

A+B- Bidding method where contractor offers base price plus special pricing

A+B+C Bidding method where contractor offers base price plus special pricing on two options

**ABS** Antilock Brake System

**ACC** Asphaltic Cement Concrete

**Acceptance Test** A test to verify that a product, a process or a service is in conformance with the system specifications

**ACHP** Advisory Council on Historic Preservation

**ACI** American Concrete Institute: a non-profit technical and educational society incorporated in the State of Michigan. ACI International is dedicated to improving the design, construction, manufacture and maintenance of concrete structures.

**ACRP** Airport Cooperative Research Program: authorized in December 2003 as part of the Vision 100-Century of Aviation Reauthorization Act. The ACRP is sponsored by the Federal Aviation Administration (FAA) and managed by the National Academies, acting through its Transportation Research Board (TRB), with program oversight and governance provided by representatives of airport operating agencies.

**ACTS** American Coalition for Traffic Safety, Inc.

**Acts of God** An earthquake, tidal wave, tornado, hurricane, or any other cataclysmic phenomenon of nature beyond the Contractor's control that causes loss, damage, or injury to the work. Weather is not considered an "Act of God" unless it can be shown conclusively that such weather could not have been anticipated as a normal hazard of the contract.

**ADA** Americans with Disabilities Act of 1990: a federal law that requires public facilities (including transportation services) to be accessible to persons with disabilities, including those with mental disabilities, temporary disabilities, and the conditions related to substance abuse.

**Addendum** Change in bid proposals during time of advertisement

**ADOT** Arizona Department of Transportation

**ADT** Average Daily Traffic

Advertisement The public announcement inviting bids for work to be performed or materials to be furnished

**AGC** Associated General Contractors

AGO Attorney General's Office

**AGRC** Automated Geographic Reference Center

**AHS** Automated Highway System

AI Asphalt Institute

**AIA** American Institute of Architects

Air Microscopic bubbles of air entrained in concrete

**AISC** American Institute of Steel Construction: a non-profit trade association and technical institute established in 1921 to serve the structural steel industry in the U.S. Their purpose is to promote the use of structural steel through research activities, market development, education, codes and specifications, technical assistance, quality certification and standardization with an emphasis on: unifying the industry with a common purpose; increasing the structural steel industry's share of the construction market; supporting the structural steel industry to be innovative and competitive in a worldwide construction market.

AISI American Iron and Steel Institute

**AMRL** AASHTO Materials Reference Laboratory

ANSI American National Standards Institute

**AOG** Association of Governments

**APA** American Planning Association: national organization of professional planners; focus includes planning policy, lobbying and public information.

**APE** Area of Potential Effect

**APL** Accepted Products Listing

APTA American Public Transit Association

**APTS** Advanced Public Transportation System

**APWA** American Public Works Association: an international educational and professional association of public agencies, private sector companies and individuals dedicated to providing high-quality public works goods and services.

**APTA** American Public Transit Association: has been representing the transit industry for over 100 years, since 1882. APTA members include bus, rapid transit and commuter rail systems, and the organizations responsible for planning, designing, constructing, financing and operating transit systems. **www.apta.com** 

AQI Air Quality Index: recent and historic Air Quality Index data

ARA American Railway Association

**AREA** American Railway Engineering Association

**ARTBA** American Road and Transportation Builders' Association: the U.S. transportation construction industry's representative in Washington, D.C. Its mission is advocating strong federal investment in the nation's transportation infrastructure to meet public demand for a safe and efficient business transportation network

**ART-PLAN** Arterial Level of Service Software: a computer software program used to evaluate the level of service (LOS) for a segment of arterial roadway with given traffic volumes, signal settings and number of lanes.

**ART-TAB** yields more generalized results than ART-PLAN, while highway capacity software (HCS) yields more specific answers.

**Arterial** A major thoroughfare

**ASCE** American Society of Civil Engineers: provides essential value to members, their careers, its partners and the public by developing leadership, advancing technology, advocating lifelong learning and promoting the profession.

**AST** Above-Ground Storage Tank

**ASTM** American Society for Testing and Materials: ASTM International is one of the largest voluntary standards development organizations in the world--a trusted source for technical standards for materials, products, systems and services.

**ATIS** Advanced Traveler Information System

**ATMS** Advanced Traffic Management System

ATV All-Terrain vehicle

**AUHMTP** Alliance for Uniform HazMat Transportation Procedures

**AVCS** Advanced Vehicle Control System

**AVHS** Advanced Vehicle Highway System

**AVI** Automated Vehicle Identification

AVL Automatic Vehicle Locator

**AVO** Average Vehicle Occupancy

**Award** The acceptance of a proposal or statement of qualifications by the Department resulting in a Contract for work between the Department and the Contractor.

AWO Air and Water Quality: RESD unit dedicated to clean air and water

**AWS** American Welding Society

AWWA American Water Works Association

-B-

**Backfill** Material used to replace, or the act of replacing material removed during construction **BARD** Bay Area Refuse Disposal (Bountiful Sanitary Landfill)

**BC** Back of Curb elevation

**B/C** Benefit/Cost

**BIA** U.S. Bureau of Indian Affairs

Bid Legally binding proposal from a contractor to perform specified work

**Bidder** Any individual or legal entity submitting a Proposal or Statement of Qualifications in response to the Department's request.

Bid Proposal The prescribed form containing the bidder's financial offer

**BLM** Bureau of Land Management

Blue Book UDOT construction or reconstruction project

**BM** Surveying term for Benchmark

**BMCS** Bureau of Motor Carrier Safety

**BMP** Best Management Practices

**BMS** Bridges Management System: process for analyzing existing conditions and identifying future needs with respect to bridges; required for the National Highway System (NHS) as a part of ISTEA.

**BOR** Bureau of Reclamation

**BRAG** Bear River Association of Governments

**BRR** Bridge Replacement and Rehabilitation Program (federal funding program)

**BTS** Bureau of Transportation Statistics: **http://www.bts.gov/**: was born as a statistical agency in 1992. The Intermodal Surface Transportation Efficiency Act (ISTEA of 1991 established BTS for data collection, analysis and reporting, and to ensure the most cost-effective use of transportation-monitoring resources.

**BTU** British Thermal Unit

-C-

CAA Clean Air Act

**CAAA** Clean Air Act Amendments: 1990 amendments to the federal Clean Air Act which classify no attainment areas and lay out rules for dealing with air pollution in such areas; specifically brought transportation decisions into the context of air quality control.

CAB Civil Aeronautics Board

**CAD** Computer-Aided Design

CAFE Corporate Average Fuel Economy Standards: federal fuel efficiency standards for automobiles

**CAT EX** Categorical Exclusion of environmental issues

CalTrans California Department of Transportation

**CAP** Commuter Assistance Program: program funded by the U.S. Department of Transportation (USDOT) which supports numerous congestion-reducing programs in a community in order to achieve the community's traffic reduction and air quality goals.

**CAPH** Crash Avoidance Performance History

**CAPWAP** Case Analysis of Pile Wave Analysis Program: a specialized computer program used in the more detailed analysis of pile driving capacities.

**CAS** Collision Avoidance System

**CASE** Computer-Aided Systems Engineering

**CBD** Central Business District

CBR California Bearing Ratio: a design concept for pavement design

**CCRL** Cement and Concrete Reference Laboratory, a division of NIST

**CCTV** Closed-Circuit T.V.

C-D Collector Distributor road

CD Collector Distributor

**CDL** Commercial Drivers License

**CDOT** Colorado Department of Transportation

CE III UDOT Civil Engineer III

**Central Lab** UDOT Central Materials Laboratory located in the MTF Building of the Calvin Rampton Complex in Salt Lake City

**CEQ** Council on Environmental Quality

**CERCLA** Comprehensive Environmental Response, Compensation and Liability Act

**CERCLIS** Comprehensive Environmental Response, Compensation and Liability Information System

**CERF** Civil Engineering Research Foundation: a not-for-profit 501(c)(3) organization created by ASCE focused on advancing the design and construction industry through innovation.

**Certificate of Compliance** A document containing a certified statement from the manufacturer concerning the quality and quantity of material delivered.

**CFR** Code of Federal Regulations: compilation of the rules of the executive department and agencies of the federal government.

**Change Order** A written order to the Contractor covering contingencies, extra work, increases or decreases in contract quantities resulting in significant changes to the character of the work, and additions or alterations to the original Contract which establishes the basis of payment and time adjustments for the affected changes.

**CHF** Centennial Highway Fund

CHIPS Durable aggregate applied a wearing or friction course to pavement; 3/8" minus clean aggregate

**CHNF** Critical Highway Needs Fund

CIP Cast-in-Place

**CL** Centerline

CL Control Line

**CMAQ** Congestion Mitigation and Air Quality Improvement Program: a new categorical funding program created under ISTEA which directs funding to projects that contribute to meeting national air quality standards in non-attainment areas for ozone and carbon monoxide.

CMP Corridor Management Plan

CMS Congestion Management System: a systematic process required under ISTEA to provide information on transportation system performance and identify alternative strategies to alleviate congestion and enhance mobility of persons and goods; process must be developed in Transportation Management Areas (TMAs) and in use by October 1, 1997; the use of CMS in non-TMAs is left to the discretion of state and local officials.

CMS Changeable Message Sign: a sign capable of displaying a number of predefined messages

**CMV** Commercial Motor Vehicles

**CO** Change Order

**COE** U.S. Army Corps of Engineers

Cold Mix Asphalt and aggregates mixed without heat

Commuter Link Your one-stop location for incidents, construction and weather-affected road conditions.

Complex UDOT headquarters, the Calvin Rampton Complex in Salt Lake City

**Conformity** Compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified. Where working tolerances are specified, conformity means compliance with such tolerances.

**Contract** The written agreement between the Department and the Contractor establishing the obligations of the parties for the performance of the work prescribed. The Contract includes the following, all of which constitute one instrument: a) invitation for Bids, b) Proposal, c) Contract Bond, d) Specification, e) Special Provisions, f) General and detailed plans, g) Notice of award, h) Notice to proceed.

**Contract Bid Item** A specific unit of work for which a price is provided in the contract. For projects that include P+T bidding. Time is a bid item.

**Contract Bond** The approved form of security, executed by the Contractor and the Contractor's Surety or Sureties, guaranteeing complete execution of the Contract and all pertinent change orders and the payment of all legal debts pertaining to the construction of the project.

**Core Test** Machine equipped with a rotating lead that you attach a 2", 3" or some oversized drill bit to that cuts a cylinder from the existing pavement of floor, that can then be evaluated for density, gradation, and in the case of the TLA cores where 12" cores can be cut, 12" squares to be placed in a rut-testing machine to determine the stiffness or strength of the in-place material, in this case asphalt.

**Cost Plus** Construction contracting method where contractor is paid for all costs plus a fixed profit percentage or fee.

**CP** Choke Point

**CPAC** Cooperating and Participating Agency Committee

**CPD** Cost per Dwelling

**CR** Commuter Rail

**CRP** Cooperative Research Program

CSI Construction Specifications Institute

**CSP** Concrete Sewer Pipe

CSRB Career Service Review Board

**CSS** Context-Sensitive Solutions

CT Crash Testing: http://www.nhtsa.dot.gov/cars/testing/ncap/

**CTCs** Community Transportation Coordinators: people contracted by the Transportation Disadvantaged Commission to provide complete, cost-effective and efficient transportation services to transportation disadvantaged (TD) persons.

CV Commercial Vehicle

CVO Commercial Vehicle Operations

CVSA Commercial Vehicle Safety Alliance

CWA Clean Water Act

-D-

**DAB** Digital Audio Broadcast

**DAQ** Division of Air Quality

**DAT** Department Administrative Team

**DBE** Disadvantaged Business Enterprise

**DCAA** Defense Contract Audit Agency

**DCP** Delegated Contract Process

**DDA** Decibels on the A-weighted scale

**DEIS** Draft Environmental Impact Statement

**DEQ** Department of Environmental Quality

**DET** Department Engineering Team

**Detector** An electronic device for detecting the presence of motor vehicles, pedestrians, etc. (May be magnetic loops, radar, visual [video], acoustic, push-button.)

**DFCM** Utah Division of Facilities and Construction Management

**DHRM** Utah Department of Human Resource Management

**DI** Drop Inlet

**DMS** Dynamic Message Sign

**DMV** Division of Motor Vehicles

**DNR** Department of Natural Resources

**DOE-FOE** Determination of Eligibility and Finding of Effect

**DOI** U.S. Department of the Interior

**DOT** Department of Transportation: agency responsible for transportation at the local, state or federal level.

**DPS** Utah Department of Public Safety

**DVMT** Daily Vehicle Miles of Travel: the total miles traveled by all vehicles in a specific area over a 24-hour period; often used to compare changes in travel patterns over time.

**DWR** Utah Division of Wildlife Resources

-E-

**EA** Environmental Assessment: a study used to determine if a full Environmental Impact Statement (EIS) is required for a project; documents the need for the project, the alternatives considered, the preferred alternative and the impacts of the proposed project.

**EAP** Employee Assistance Program

**EB** Eastbound

**EBS** UDOT's Electronic Bid System

**EEO** Equal Employment Opportunity

**EF** Experimental Features

**EIS** Environmental Impact Statement: a comprehensive study of the impacts of and alternatives to proposed projects; required by the National Environmental Policy Act (NEPA).

EM I UDOT Engineering Manager I

**EM II** UDOT Engineering Manger II

**EPA** Environmental Protection Agency: a federal agency responsible for dealing with national environmental issues.

EPG Emergency Response Guide

ePM Electronic Project Management

**ERNS** Emergency Response Notification System

**ESA** Endangered Species Act

ESAL Equivalent Single Axle Loads: used in calculating pavement designs

**ETA** Expected Time of Arrival

ETC Employee Transportation Corridor

ETS Event Tracking System

ETTM Electronic Toll and Traffic Management

EUSERC Electric Utility Service Equipment Requirements Committee

**Experimental Feature** A material, process, method, equipment item, traffic operational device, or other feature that: (1) has not been sufficiently tested under actual service conditions to merit acceptance without reservation in normal highway construction, or (2) has been accepted but needs to be compared with alternative acceptable features for determining their relative merits and cost effectiveness.

-F-

**FAA** Federal Aviation Administration

FAI Federal Aid Interstate

FAP Federal-Aid Primary Road Funding

FAPG Federal Aid Policy Guide

FAR Federal Acquisition Regulations

FARS Fatal Accident Reporting System

FAS Federal-Aid Secondary Road Funding

FAU Federal-Aid Urban

FBWMA Farmington Bay Waterfowl Management Area

**FCAG** Five County Association of Governments

FCC Federal Communications Commission

FCI Functional Capacity Index

Feasibility Study A study about a project's feasibility that is summarized in a document

**FEIS** Final Environmental Impact Statement

FEMA Federal Emergency Management Agency

FG Finished Grade

FHPM Federal Aid Program Manual

FHSS Frequency-Hopping Spread Spectrum: a short-range radio technique used by UDOT for digital communications.

**FHWA** Federal Highway Administration: division of the U.S. Department of Transportation responsible for administering federal highway transportation programs. http://www.fhwa.dot.gov

FINDS Facility Index System

FINET Utah State Government finance and accounting system

FIPS Federal Information Processing Standard

FIRM Flood Insurance Rate Map

**Fixed Time Intersection Signal Control** Intersection signal control with fixed sequences and fixed duration of the signal timing

FL Flow Line of gutter or man-made channel

**Flexible Operational Capability** Allows the direction lanes to change to accommodate uneven traffic flow **Flowable Fill** A very lean concrete used for backfill and bedding

**FMCSA** Federal Motor Carrier Safety Administration: organization created to reduce crashes, injuries, and fatalities involving large trucks and buses

FMS Freeway Management System

FO Fiber Optic

FOIA Freedom of Information Act

**FONSI** Finding of No Significant Impact (possible result of NEPA process)

**Force Account** Work performed by contractor or state forces at direction of the engineer characterized by resolving costs after the work is done

**FOT** Field Operational Test

FPPA Farmland Protection Policy Act

**FRA** Federal Railroad Administration: created by the Department of Transportation Act of 1966 [49 U.S.C. 103, Section 3(e)(1)]. The purpose of FRA is to promulgate and enforce rail safety regulations; administer railroad assistance programs; conduct research and development in support of improved railroad safety and national rail transportation policy; provide for the rehabilitation of Northeast Corridor rail passenger service; and consolidate government support of rail transportation activities.

**Frontage Road** An arterial type roadway that parallels a major transportation facility such as a freeway **FRP** Fiber Reinforced Polymer

FS Forest Service

**FSS** Federal Specifications and Standards

**FTA** Federal Transit Administration: provides financial assistance to develop new transit systems and improve, maintain and operate existing systems. **http://www.fta.dot.gov/** 

**FTE** Full-Time Employee

**FWD** Falling Weight Deflectometer; provides structural numbers of pavement

### -G-

**GAO** General Accounting Office <a href="http://www.gao.gov">http://www.gao.gov</a>/ is the audit, evaluation, and investigative arm of Congress. GAO exists to support Congress in meeting its Constitutional responsibilities and to help improve the performance and ensure the accountability of the federal government to the American people.

GASB 34 Government Accounting Standards Board Recommendation 34.: standard that mandates life-cycle assets management

**GDT** Georgia Department of Transportation

**GF** General Fund

GIS Geographic Information System: database and mapping software that is used in transportation planning

**GPS** Global Positioning System

**Grade** The slope (ratio of change in elevation to change in distance) of a roadway, typically given in a percentage.

**Grade Separation** A vertical separation between intersecting roads or railroad tracks. One facility travels over the other via an overpass or other structure.

**GRAMA** Government Records Access Management Act

Green Book AASHTO Policy on Geometric Design of Highways

**GSA** General Services Administration

**GSM** Global System for Mobile Communications

#### -H-

**HAL** High Accident Location

**HAR** Highway Advisory Ratio

**HAZMAT** Hazardous Materials

**HCM** Highway Capacity Manual: the recognized manual describing accepted methodology for computing the capacity and level-of-service for various types of roads; published by the Transportation Research Board (TRB).

**HDPE** High-Density Polyethylene

HFRS-2P High-Float Rapid-Setting Emulsified Polymerized Asphalt

**HM** Hazardous Material

**HMA** Hot-Mix Asphalt

**HMAC** Hazardous Materials Advisory Council

HMIRS Hazardous Materials Incident Reporting System

HMIS Hazardous Materials Information System

**HOS** UDOT Highway Operations Specialist, obsolete position name

**HOT** High Occupancy Toll

Hot Mix Asphalt cement concrete

**HOV** High Occupancy Vehicle

**HQ** Headquarters

HRB Highway Research Board

HRI Highway Rail Intersection

**HSR** High-Speed Rail

HTML Hypertext Markup Language

**HTTP** Hypertext Transfer Protocol

**HUB** A field location (may be a building or cabinet) where electronic communications are concentrated from the local area for long-distance transmission (usually to the TOC).

**HUF** Highway Users Federation

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IA Independent Assurance

IAT Independent Agency Testing

**IATA** International Air Transport Association

**ICC** Interstate Commerce Commission

**IDEA** Innovations Deserving Exploratory Analysis: programs fund research into promising but unproven innovations in four transportation areas: Highways, High-Speed Rail, Safety, and Transit.

**IEEE** Institute of Electrical and Electronics Engineers

IFB Invitation for Bid

IFTA International Fuel Tax Agreement

**IIHS** Insurance Institute for Highway Safety: the Insurance Institute for Highway Safety is a non-profit organization supported by the auto insurance industry. <a href="http://www.iihs.org/">http://www.iihs.org/</a>

**ILS** Intensive Level Survey

**IM** Interstate Maintenance Funds

IMS Intermodal Management System: systematic process to improve the coordination in planning and implementation of air, water and land-based transportation facilities and services; required for transportation facilities connected to the National Highway System (NHS) as a part of ISTEA; must be in use by October 1, 1997; for non-NHS transportation facilities, the extent of an IMS is left to the discretion of state and local officials.

**Incident Management** Detection of a traffic incident, implementation of appropriate responsive actions and handling of the traffic until normal traffic conditions have been restored. UDOT has incident management trucks/crews canvassing the highways to assist motorists in need.

**Invitation for Bids** The advertisement for proposals for all work or materials on which bids are requested. Such advertisement indicates with reasonable accuracy the quantity and location of the work to be performed or the character and quantity of the material to be furnished and the time or the character and quantity of the material to be furnished and the time and place of the opening of proposals.

IP Internet Protocol

**IRI** International Roughness Index

IRP International Registration Plan

IRVM Integrated Roadside Vegetation Management

**ISA** Intelligent Speed Adaptation

**ISO** International Standards Organization

ISS Information Support Services – UDOT division that supports computers and computer programs

**ISTEA** Intermodal Surface Transportation Efficiency Act of 1991: federal law which restructured transportation planning and funding by requiring consideration of multimodal solutions, emphasis on the movement of people and goods as opposed to traditional highway investments, flexibility in the use of transportation funds, a greater role of MPOs, and a greater emphasis on public participation.

**ITD** Idaho Transportation Department

**ITE** Institute of Transportation Engineers: an international society of professionals in transportation and traffic engineering; publishes *Trip Generation* (a manual of trip generation rates by land use type).

ITS Intelligent Transportation System: use of computer and communications technology to facilitate the flow of information between travelers and system operators to improve mobility and transportation productivity, enhance safety, maximize the use of existing transportation facilities, conserve energy resources and reduce adverse environmental effects; includes concepts such as "freeway management systems," "automated fare collection" and "transit information kiosks."

**ITTE** Institute of Traffic and Transportation Engineers

**IVHS** Intelligent Vehicle/Highway Systems: technologies that focus on monitoring, guiding or operating motorized vehicles, or providing information to travelers about road and traffic conditions; examples include computerized navigational systems in cars, collision warning systems and freeway ramp metering.

-J-

**JPA** Joint Participation Agreement: legal instrument describing intergovernmental tasks to be accomplished and/or funds to be paid between government agencies.

-K-

**K Design Hour Factor**: Used to convert daily traffic counts to hourly traffic counts, and annual average traffic counts to peak season traffic counts; most roads are designed for peak hour, peak season traffic counts.

km/h Kilometers per HourKOP Key Observation Point

-L-

LA Landscape Architect

LAB League of American Bicyclists: a national advocacy group located in Washington, D.C.

LAN Local Area Network

Lane Mile One 12-foot-wide traffic lane 5,280 feet long

LA Rattler Horizontal rotating drum used to test aggregate durability

LA Wear Test to evaluate aggregate durability

**LED** Light-Emitting Diode

**LEO** Low Earth Orbit Satellite System

LL Liquid Limit

LM Lane Mile

**LOM** Level of Maintenance

**LOS** Level of Service (a traffic engineering term describing how freely traffic moves on a given road or through an intersection)

LPA Locally Preferred Alternative

**LPD** Liability and Property Damage

**LQP** Laboratory Qualifications Program

**LRFD** Load Resistance Factor Design: a system of structural analysis which in recent years has been developed and required by AASHTO for the design of bridges and other related structural elements

**LRT** Light Rail Transit: an electric rail system with a light-volume traffic capacity compared to heavy rail. It has single cars or short trains, and passengers board at track or car floor level.

**LRTP** Long-Range Transportation Plan

LS Land Surveyor

LTAP Local Technical Assistance Program

LTPP Long-Term Pavement Performance Program

**LUST** Leaking Underground Storage Tanks

-M-

M3 Former training program for UDOT maintenance personnel

MAG Mountainland Association of Governments

**Major Contract Item** Any bid item, or item added by change order, having a contract value in excess of 5 percent of the original contract amount

MAP Management Analysis and Planning System

**MBE** Minority Business Enterprise

MC Motor Carrier

MCMIS Motor Carrier Management Information System

MCO Maintenance and Construction Operations

MCSAP Motor Carrier Safety Assistance Program

MC-xx Medium Cure Liquid Asphalt

MDC Mobile Data Computer

**MDOT** Montana Department of Transportation

**MDT** Mobile Data Terminal

**MFI** Maintenance Feature Inventory

MHTA Multistate Highway Transportation Agreement

MI Messaging Infrastructure

Minor Contract Item Any bid item not meeting the definition of a Major Contract item

MISLE Marine Information for Safety and Law Enforcement

MIS Major Investment Study

MMQA Maintenance Management Quality Assurance Program

MMS Maintenance Management System

**MOA** Memorandum of Agreement

**Modem** modulator / demodulator. An electronic device for transmitting/receiving electronic information. (Communicates using telephone lines, fiber optics, radio, etc.)

MOE Measures of Effectiveness: a quantitative parameter indicating the performance of a facility or service.

**MOI** Manual of Instruction

**MOT** Maintenance of Traffic

MOU Memorandum of Understanding

**MP** Milepost

**MPC** Mountain Plains Consortium

MPEG2 A standard protocol for digitally encoding video signals, (also used on DVDs)

**MPH** Miles per Hour

MPO Metropolitan Planning Organization

MSE Mechanically-Stabilized Earth Wall

**MSIS** Marine Safety Information System

MST Minimum Sampling and Testing Guide

MTA Metro Transit Authority

MTF Central Materials Lab, Warehouse and Shops

**Multicast** Internet protocol for sending streaming video to multiple locations.

MUTCD Manual of Uniform Traffic Control Devices

#### -N-

NAAQS National Ambient Air Quality Standard

NAC Noise Abatement Criteria

NARCS Natural Resources Conservation Service

**NASTO** Northeast Association of State Transportation Officials

NAV Navigation

**NB** Northbound

**NBIP** National Bridge Inspection Program

NCHRP National Cooperative Highway Research Program: administered by the **Transportation Research Board** (TRB) and sponsored by the member departments (i.e. individual state departments of transportation) of the **American Association of State Highway and Transportation Officials** (AASHTO), in cooperation with the **Federal Highway Administration** (FHWA). The National

Cooperative Highway Research Program (NCHRP) was created in 1962 as a means to conduct research in acute problem areas that affect highway planning, design, construction, operation, and maintenance nationwide.

**NCSL** National Conference of State Legislatures

**NDOT** Nevada Department of Transportation

**NEC** National Electric Code

**NEPA** National Environmental Policy Act of 1969

NGA National Governors Association

**NHI** National Highway Institute: provides leadership and resources for the development and delivery of training and education programs to improve the quality of our Nation's highway system and its intermodal connections

NHPA National Historic Preservation Act of 1966

**NHPN** National Highway Planning Network

NHS National Highway System: federal funding category and established system of roads

**NHTSA** National Highway Traffic Safety Administration: primarily deals with safety issues of the driver and vehicles, while FHWA primarily focuses on issues related to the roadway itself

http://www.nhtsa.gov/

**NII** National Information Infrastructure

**NIST** National Institute of Standards and Testing

**NMDOT** New Mexico Department of Transportation

**NOI** Notice of Intent

Notice to Proceed Written Notice to the Contractor to begin the Contract

NPDES National Pollution Discharge Elimination System

NPEP UDOT New Product Evaluation Panel

**NPL** National Priorities List (Superfund sites)

NRC National Research Council: a private not-for-profit institution, it is the primary operating agency of the NAS

**NRHP** National Register of Historic Places

**NSF** National Science Foundation: an independent agency of the U.S. Government, established by the National Science Foundation Act of 1950, as amended, and related legislation, 42 U.S.C. 1861 et seq., and was given additional authority by the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885), and Title I of the Education for Economic Security Act (20 U.S.C. 3911 to 3922)... To promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. <a href="http://www.nsf.gov">http://www.nsf.gov</a>

**NTCIP** National Transportation Communications for ITS Protocol: a family of electronic communication protocol standards developed by AASHTO, ITE, and NEMA. It is under the guidance of FHWA

NTL National Transportation Library <a href="http://ntl.bts.gov/index.cfm">http://ntl.bts.gov/index.cfm</a>: charged with improving the availability of transportation-related information needed by Federal, state and local decision makers, the National Transportation Library's mission is to increase timely access to the information that supports transportation policy, research, operations, and technology transfer activities. The NTL was established in

1998 through the Transportation Equity Act for the 21<sup>st</sup> Century and serves as a repository of materials from public, academic and private organizations.

NTS National Transportation System: refers to those elements/facilities from aviation, highways (including the NHS), railroads, ports and waterways, pipelines and public transportation which play an important role in meeting national transportation needs; will be used to provide a policy framework to evaluate impacts and effectiveness of federal laws and regulations, to plan federal infrastructure investments, and to evaluate service levels; currently being developed by the U.S. Department of Transportation (USDOT).

**NTSB** National Transportation Safety Board

NTTC National Tank Truck Carriers, Inc.

Nuc Gauge Nuclear density gauge used in compaction testing

**NWI** National Wetlands Inventory

**OAT** Owner Agency Testing

**OCIP** Owner-Controlled Insurance Program

**OCR** Optical Character Recognition: automatic interpretation of characters by analyzing pictures using computer software

**ODOT** Oregon Department of Transportation

**O-D Survey** Origin-Destination Survey: a study which identifies where a selected sample of persons or cars came from (origin) and where they are going (destination); used to help understand travel patterns and trip purposes

OGSC Open-Graded Seal Coat

**OHV** Off-Highway Vehicles

**OMB** Office of Management and Budget, a division of the White House

Orange Book State-funded pavement preservation maintenance contract

Org UDOT organizational unit code (4 digits)

**ORV** Off-Road Vehicle

**OSHA** Occupational Safety and Health Act

Over Saturation A traffic condition in which the arrival flow rate is lower than the capacity

-P-

**P/L** Property Line

PAC Project Advisory Committee

PA/SI Preliminary Assessment and Site Investigation

**PATH** Mission is to develop solutions to the problems of California's surface transportation systems through cutting-edge research. PATH develops these solutions by harnessing the knowledge of transportation researchers, working in conjunction with experts in the fields of information technology, electrical engineering, mechanical engineering, economics, transportation policy and behavioral studies. The PATH Partners for Advanced Transit and Highways: California charter includes conducting leading research, planning and evaluating field operational tests, developing partnerships between academia, the public sector and private companies, and educating both students and practitioners.

**PC** Point of Curvature

**PCA** Portland Cement Association: where cement and concrete are concerned, so is the PCA: in manufacturing, in raising the quality of construction, in improving our product and its uses, in contributing to a better environment. In practice, this mandate means well-rounded programs of market development, education, research, technical services, and government affairs on behalf of PCA members.

**PCS** Pavement Condition System

**PDA** Personal Digital Assistant

**PDA** Pile-Driving Analyzer: a computer system used by geotechnical personnel to monitor the performance of pile driving

PDBS Project Development Business System

**PDL** Project Delivery List

**PDPL** Performance Data Product List

**PE** Preliminary Engineering

**PE** Professional Engineer

**PEHP** Public Employees Health Plan

**PEQIT** Performance Evaluation Quality Improvement Team

**PGAB** Performance-Graded Asphalt Binder

**Phase** (traffic signal) A single, controlled traffic movement as defined in the signal controller. Phases may be combined as "overlaps."

PI Plasticity Index

PI Principal Investigator (Project)

PI Public Information

PI Public Involvement

**PI** Point of Intersection

PIC UDOT Regional Public Involvement Officer

Plant Mix Asphalt cement concrete delivered to the job hot

**PLB** Project-Level Budgeting

**PLS** Professional Land Surveyor

PM Project Management

PMS Pavement Management System: a systematic process utilized by state agencies and MPOs to analyze and summarize pavement information for use in selecting and implementing cost-effective pavement construction, rehabilitation, and maintenance programs; required for roads in the National Highway System (NHS) as a part of ISTEA; the extent to which the remaining public roads are included in the process is left to the discretion of state and local officials; criteria found in 23 CFR 500.201-.209; must be in use by October 1, 1997.

PMSC Plant-Mix Seal Coat

PO Purchase Order

POE Port of Entry, Motor Carrier Division

**PONTUS** Computer system used to track structure data and condition

**PORT** Port of Entry, Motor Carrier Division

**POV** Privately-Owned Vehicle

**PPE** Personal Protective Equipment

**PPMS** Preconstruction Project Management System

**PPP** Private, Public Partnership

**P&R** Park and Ride: a combined journey including changing of travel mode from bicycle to public transport or vice versa during a single journey

**Preemption** (traffic signal): the technique that a signal controller gives priority to trains, emergency vehicles, and/or buses

**Prequalification/Initial Financial Screening Statement** The specific forms on which required information is furnished about the Contractor's ability to perform and finance the work

**Proctor** A test method to determine the maximum compacted density of soils and aggregates

**Proposal** A bidder's written offer on Department-furnished forms, to perform stated work at the quoted prices.

**PT** Surveyors' term for Point of Tangency

**PTMS** Public Transportation Facilities and Equipment Management System: a systematic process (required under ISTEA) utilized by state agencies and MPOs to collect and analyze information on the condition and cost of transit assets on a continual basis; data is to be used to help people choose cost-effective strategies for providing and keeping transit facilities and equipment in good condition; process must be developed in Transportation Management Areas (TMAs); the use of CMS in non-TMAs is left to the discretion of state and local officials.

Purple Book State-funded reconstruction project or new construction

PVC Surveyors' term for Point of Vertical Curve

-Q-

**OA** Ouality Assurance

**QC** Quality Control

**QIT** Quality Improvement Council

-R-

 ${f RAC}$  Research Advisory Committee: the board is made up of the Executive Directors of the DOTs and the chairperson from RAC

http://www4.NAS.edu/trb/scor/SCORmain.nsf/?opendocument:

**RAP** Recycled Asphalt Pavement

**RCC** Roller Compacted Concrete

**RCE** Resident Construction Engineer

**RCP** Reinforced Concrete Pipe

RCRA Resource Conservation and Recovery Act

**RCRIS** Resource Conservation and Recovery Information System

**RC-xx** Rapid-Cure Liquid Asphalt

Rebar Reinforcing steel bars used in concrete construction

**RD** Research and Development

**REIC** Regional Employee Improvement Council

**RFI** Request for Information

**RFP** Request for Proposals

**RFO** Request for Ouotations

**RFO** Request for Qualifications

RIP Research in Progress (performed through the Transportation Research Board): database contains about 7,600 records of current or recently completed transportation research projects. Each month about 100 new RIP projects are added to the database and another 150 RIP records are updated. Most of the RIP records are projects funded by Federal and State Departments of Transportation. University transportation research is also included. In 1998, the **Transportation Association of Canada** began supplying records from its **Canadian Surface Transportation Research Database** for RIP.

Risk Management UDOT term for safety and accident control

**RME** Region Materials Engineer

ROD Record of Decision (possible result of NEPA [National Environmental Policy Act of 1969] process)

Rotational UDOT engineer participating in Rotational Engineering Training Program

Rotomill The process of grinding off the top layer of the roadway in preparation for resurfacing

Roundabout A circular intersection design

**ROW** Right-of-Way (R/W): real property that is used for transportation purposes; R/W defines the extent of the corridor that can be used for the road and associated drainage.

**RP** Reference Post (now replaced by Mileposts)

RPI Railway Progress Institute

**RPM** Raised Pavement Marker

**RO** Reportable Quantity

**RS** Rapid-Set Liquid Asphalt

**RSPA** Research and Special Projects Administration **http://www.rspa.dot.gov/**: established by the U.S. Secretary of Transportation in 1977 to be the operating administration for those programs that did not fit into the more narrowly defined missions of the existing modal administrations. One of the major emphasis areas is pipelines.

**RT** Recreational Trails Program (federal funding program)

**RWIS** Roadside Weather Information System

R-xx Retaining wall number

### **-S-**

**SA** Surface Area; paved surface measurement unit 12 Feet by 5,280 feet (calculated value based on a measured length and width)

SB Southbound

SC Soil Cement

**SCAG** Six County Planning Group in Central Utah

**SCOR** Standing Committee on Research

SCS (USDA) Soil Conservation Service (now NARCS)

SC-xx Slow-Cure Liquid Asphalt

**SEAG** Southeast Association of Governments

Senior Leader UDOT high-level management official

**Shed** UDOT maintenance station

**SHPO** State Historic Preservation Officer (Utah)

**SIP** State Implementation Plan

Skills Match The only way you can apply for a job at UDOT

**SLCIA** Salt Lake City International Airport

**SLCWCD** Salt Lake County Water Conservancy District

**SMA** Stone Matrix Asphalt

SMS Highway Safety Management System: a systematic process utilized by state agencies and MPOs to provide information necessary for selecting and implementing effective highway safety strategies and projects designed to reduce the number and severity of traffic accidents; required for roads in the National Highway System (NHS) as a part of ISTEA; must be in use by October 1, 1997; the extent to which the remaining public roads are included in the process is left to the discretion of state and local officials.

Spaghetti Bowl Intersection of I-15, I-80, and SR-201 in Salt Lake City

**Special Provisions** A unique specification or a modification or revision to the standard specifications applicable to an individual contract

**SPR** State Planning and Research Funds (federal funding source)

**SPUI** Single-Point Urban Interchange

**SR** State Route

**SRPP** Strategic Regional Policy Plan: a plan developed by each regional planning council (RPC), which contains goals and policies addressing affordable housing, economic development, emergency preparedness, natural resources of regional significance, and regional transportation issues; must be consistent with the state comprehensive plan (SCP).

Standard Specifications Specifications approved for general application and repetitive use

**Standards** Specific requirements for material properties, placement, design elements, methods or products intended for consistent use statewide on UDOT projects and facilities

**Station** UDOT Maintenance Station

**STIP** State Transportation Improvement Program: a staged, multiyear, statewide, intermodal program that is consistent with the state and metropolitan transportation plans; identifies the priority transportation projects to be done over the next three years; is developed by the state DOT and must be approved by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) at least every two years.

**STP** Surface Transportation Program: a new federal block grant-type program created by ISTEA; may be used by states and localities for any roads (including the National Highway System) that are not functionally classified as local or rural minor collectors; roads eligible under this program are collectively known as federal-aid roads.

**STP** Statewide Transportation Plan: a long-range transportation plan (at least 20 years) which provides direction for developing a statewide transportation system

**STPP** Surface Transportation Policy Project: a national public interest group dedicated to ensuring that transportation policy and investments help conserve energy, protect environmental and aesthetic quality, strengthen the economy, promote social equity, and make communities more livable; emphasizes the needs of people, rather than vehicles, in assuring access to jobs, services and recreational opportunities.

**Subcontractor** An individual or legal entity that performs part of the Contractor's required work through a contract agreement with the Contractor

Supplemental Specifications Approved additions and revisions to the Standard Specifications

Surface Area Paved area 12 feet by 5,280 feet long

**SWE** Society of Women Engineers

**SWPPP** Storm Water Pollution Prevention Plan

-T-

**T1** High-speed computer connection

T2 Technology Transfer

T3 T cubed

**T-91** Form used by maintenance supervisors to enter daily labor, equipment materials and accomplishments

T304 AASHTO-sponsored test method

**TAC** Technical Advisory Committee: a standing committee of most metropolitan planning organizations (MPOs); function is to provide advice on plans or actions of the MPO from planners, engineers and other staff members (not general citizens)

**TAZ** Traffic Analysis Zone: the smallest geographical area routinely used for computer travel simulation. The number of dwellings, population, employment, etc. per TAZ is estimated for existing and future years, for subsequent use in trip generation. (Rule-of-thumb: maximum of 10,000 ADT from each TAZ.)

**TC** Top of Curb elevation

**TCM** Transportation Control Measure

**TCPU** Transportation, Communications, and Public Utilities

**TCRP** Transit Cooperative Research Program: established under Federal Transit Administration (FTA) sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and reauthorized in 1998 by the Transportation Equity Act for the 21st Century (TEA-21).

TCS Traffic Control Supervisor

**TDM** Travel Demand Management: includes actions or programs that encourage people to travel at alternative times, or with few vehicles to reduce congestions. TDM reduces traffic volumes through methods including ridesharing, park and ride operations, staggered work hours, and transit improvements.

**TDM** Transportation Demand Management

**T&E** Threatened and/or Endangered (i.e. species)

**TEA** Transportation Enhancement Activity: specific activities which can be funded with Surface Transportation Program (STP) funds; activities include pedestrian/bicycle facilities, acquisition of scenic easements and scenic historic sites, scenic or historic highway programs, scenic beautification, historic preservation, rehabilitation/operation of historic transportation structures, railway corridor preservation, control/removal of outdoor advertising, archeological planning/research and mitigation of highway runoff water pollution.

**TEA21** Transportation Equity Act for the 21<sup>st</sup> Century

**TECH IV** UDOT senior civil engineering technician usually assigned as assistant to field or design engineers

**TEIC** Transportation Employees Improvement Council

**TEP** Technical Evaluation Panel

**TFHRC** Turner-Fairbank Highway Research Center **http://www.tfhrc.gov/**: a federal agency of the U.S. Department of Transportation funded through a 6-year transportation authorization. Provides transportation research funds to the state DOTs through the SPR program.

Third Party A company or person not party to a contract; independent consultant

TIC Transportation Information Center

**TIF** Transportation Improvement Fund

**TIFA** Trucks Involved In Fatal Accidents

**TIG** Technology Implementation Group **http://www.aashtotig.org**: created in 2001 to champion the implementation of ready-to-use technologies, products or processes resulting in economic or qualitative benefits

**TIN** Technology Implementation Network: generally the TIN is a committee concerned with technology implementation and is basically internal to FHWA

**TIP** Transportation Improvement Program

TM Traffic Management

TMG Traffic Monitoring Guide, published by FHWA

**TMO** Transportation Management Organization: see TMA.

**TMS** Traffic Monitoring Station: a permanent electronic TMS/H station for traffic data collection which communicates real-time conditions to a central facility

**TMS/H** Traffic Monitoring System for Highways: a systematic process for collecting data regarding traffic counts, types of vehicles, vehicle weight and vehicle occupancy; all public roads except local or rural minor collectors are to be included; required by ISTEA to be in operation by October 1, 1996.

**TOC** Traffic Operation Center

**TP** Surveying term for Turning Point

**TQM** Total Quality Management

**Traffic Data Collection** Collection of time and space-related characteristics of the traffic flow such as volume, speed, occupancy and travel time, and changes in these

**Traffic Signal Cycle Length** Time (in seconds) for a traffic signal to cycle through a complete sequence of signal indications

**Trans Tech** UDOT Transportation Technician

**TRB** Transportation Research Board: a unit of the National Research Council whose purpose is to advance knowledge about transportation systems; publishes the Highway Capacity Manual

**TRIS** Transportation Information Services: the Transportation Research Information Services Database is the world's largest and most comprehensive bibliographic resource on transportation information <a href="http://www4.trb.org/trb/tris.nsf">http://www4.trb.org/trb/tris.nsf</a>

TRMC Transit Management Center

TSM Transportation Systems Management

**TxDOT** Texas Department of Transportation

-U-

**UBAG** Uintah Basin Association of Governments

**UBC** Uniform Building Code

**UDEQ** Utah Department of Environmental Quality

**UDNR** Utah Department of Natural Resources

**UDOT** Utah Department of Transportation

**UDWO** Utah Division of Water Quality

UDWR Utah Division of Wildlife Resources

**UHP** Utah Highway Patrol

**UMTA** Urban Mass Transit Association

UMTRI University of Michigan Transportation Research Institute

**UNHP** Utah Natural Heritage Program

**UPDES** Utah Pollution Discharge Elimination System

**UPEA** Utah Public Employees Association

**UPM** Uniform Patching Mix – cold-mix asphalt used for filling potholes

**UPRR** Union Pacific Railroad Company

**UPS** Uninterruptible Power Supply

**URAA** Uniform Relocation Assistance Act (Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970)

**URMCC** Utah Reclamation Mitigation Conservation Commission

**US-x** Federally numbered highway

USAS United States of America Standard Institute

USC United States Code

**USCG** United States Coast Guard

USDA United States Department of Agriculture

**USDOT** United States Department of Transportation

USFWS United States Fish and Wildlife Service

**USGS** United States Geological Survey

**USHPO** Utah State Historic Preservation Office

**UTA** Utah Transit Authority

**UTBC** Untreated Base Course

**UTRAC** Utah Transportation Research Advisory Council (UTRAC): provides guidance and oversight to UDOT's research program. The Council reviews and approves the division's annual work program and establishes priorities for proposed studies.

-V-

**VE** Value Engineering

**VIUS** Vehicles Inventory and Use Survey

VMS Variable Message Sign

VMT Vehicle Miles of Travel

VOC Volatile Organic Compound

VPD Vehicles per Day: a ratio used in defining the hourly volume

VPH Vehicles per Hour: a ratio used in defining the daily volume

VRT Visual Risk Technologies, Inc.

### -W-

WaDOT Washington Department of Transportation

WAN Wide Area Network

WASHTO Wasatch Association of State Highway Transportation Officials

WB Westbound

WBWCD Weber Basin Water Conservation District

WCF Workers' Compensation Fund: an insurance program designed to cover medical expenses and protect earnings of employees injured on the job

WCWCD Washington County Water Conservancy District

Weigh In Motion Measuring the weight of the axles of a moving vehicle

Wetland A watercourse, lake, pond, spring or wet area protected by federal law

WFRC Wasatch Front Regional Council

WIM Weigh in Motion

WMA Waterfowl Management Area

WP3 Storm Water Pollution Prevention Plan

WTC Western Transportation Corridor

**WWTP** Wastewater Treatment Plant

WWW World Wide Web

**WyDOT** Wyoming Department of Transportation

## -X Y Z-

Zero-Based Budgeting Figuring out what projects are needed before receiving money to fund them.

Updated: 6/07